Assoc Prof Keigo Kamata

List of Publications by Year in Descending Order

112 papers	6,357 citations	42 h-index	78 g-index
160 ext. papers	7,038 ext. citations	7.2 avg, IF	6.14 L-index

#	Paper	IF	Citations
112	Base-Assisted Aerobic C-H Oxidation of Alkylarenes with a Murdochite-Type Oxide MgMnO Nanoparticle Catalyst.. *ACS Applied Materials & Interfaces*, **2022**,	9.5	5
111	Metal oxide electrocatalyst support for carbon-free durable electrodes with excellent corrosion resistance at high potential conditions. *Sustainable Energy and Fuels*, **2021**, 5, 1374-1378	5.8	2
110	Aerobic oxidative CC bond cleavage of aromatic alkenes by a high valency iron-containing perovskite catalyst. *Catalysis Science and Technology*, **2021**, 11, 2369-2373	5.5	10
109	Efficient Oxygen Evolution Electrocatalysis on CaFe2O4 and Its Reaction Mechanism. *ACS Applied Energy Materials*, **2021**, 4, 3057-3066	6.1	10
108	One-pot aerobic oxidative sulfonamidation of aromatic thiols with ammonia by a dual-functional □MnO nanocatalyst. *Chemical Communications*, **2020**, 56, 2095-2098	5.8	11
107	Electronic Effect in a Ruthenium Catalyst Designed in Nanoporous N-Functionalized Carbon for Efficient Hydrogenation of Heteroarenes. *ACS Applied Materials & Interfaces*, **2020**, 12, 52668-52677	9.5	6
106	Template-Free Synthesis of Mesoporous □MnO Nanoparticles: Structure, Formation Mechanism, and Catalytic Properties. *ACS Applied Materials & Interfaces*, **2020**, 12, 36004-36013	9.5	17
105	One-pot reductive amination of carbonyl compounds with nitro compounds over a Ni/NiO composite.. *RSC Advances*, **2020**, 10, 32296-32300	3.7	7
104	Effects of ruthenium hydride species on primary amine synthesis by direct amination of alcohols over a heterogeneous Ru catalyst. *Chemical Science*, **2020**, 11, 9884-9890	9.4	16
103	Extremely Active Hydrogen Evolution Catalyst Electrochemically Generated from a Ruthenium-Based Perovskite-Type Precursor. *ACS Applied Energy Materials*, **2019**, 2, 956-960	6.1	19
102	Structure-Function Relationships in Fructose Dehydration to 5-Hydroxymethylfurfural under Mild Conditions by Porous Ionic Crystals Constructed with Analogous Building Blocks. *ChemCatChem*, **2019**, 11, 3745-3749	5.2	3
101	Benzylic C H fluorination over supported silver catalyst. *Molecular Catalysis*, **2019**, 475, 110463	3.3	2
100	Ambient-temperature oxidative coupling of methane in an electric field by a cerium phosphate nanorod catalyst. *Chemical Communications*, **2019**, 55, 4019-4022	5.8	20
99	Low-Temperature Reductive Amination of Carbonyl Compounds over Ru Deposited on Nb2O5□nH2O. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 4692-4698	8.3	26
98	Effect of MnO Crystal Structure on Aerobic Oxidation of 5-Hydroxymethylfurfural to 2,5-Furandicarboxylic Acid. *Journal of the American Chemical Society*, **2019**, 141, 890-900	16.4	174
97	Perovskite Oxide Catalysts for Liquid-Phase Organic Reactions. *Bulletin of the Chemical Society of Japan*, **2019**, 92, 133-151	5.1	32
96	Liquid-phase oxidation of alkanes with molecular oxygen catalyzed by high valent iron-based perovskite. *Chemical Communications*, **2018**, 54, 6772-6775	5.8	20

95	Heterogeneously Catalyzed Aerobic Oxidation of Sulfides with a BaRuO Nanoperovskite. *ACS Applied Materials & Interfaces*, **2018**, 10, 23792-23801	9.5	29
94	A high performance catalyst of shape-specific ruthenium nanoparticles for production of primary amines by reductive amination of carbonyl compounds. *Chemical Science*, **2018**, 9, 5949-5956	9.4	54
93	A bifunctional cerium phosphate catalyst for chemoselective acetalization. *Chemical Science*, **2017**, 8, 3146-3153	9.4	49
92	Amino Acid-Aided Synthesis of a Hexagonal SrMnO Nanoperovskite Catalyst for Aerobic Oxidation. *ACS Omega*, **2017**, 2, 1608-1616	3.9	25
91	Preparation of Mesoporous Basic Oxides through Assembly of Monodispersed Mg-Al Layered Double Hydroxide Nanoparticles. *Chemistry - A European Journal*, **2017**, 23, 9362-9368	4.8	24
90	Heterogeneously-Catalyzed Aerobic Oxidation of 5-Hydroxymethylfurfural to 2,5-Furandicarboxylic Acid with MnO. *ChemSusChem*, **2017**, 10, 654-658	8.3	96
89	Photoassist-phosphorylated TiO as a catalyst for direct formation of 5-(hydroxymethyl)furfural from glucose. *Physical Chemistry Chemical Physics*, **2017**, 19, 3688-3693	3.6	12
88	Electronic Effect of Ruthenium Nanoparticles on Efficient Reductive Amination of Carbonyl Compounds. *Journal of the American Chemical Society*, **2017**, 139, 11493-11499	16.4	158
87	Base Catalysis by Mono- and Polyoxometalates. *Catalysts*, **2017**, 7, 345	4	35
86	A Combined Catalyst of Pt Nanoparticles and TiO2 with Water-Tolerant Lewis Acid Sites for One-Pot Conversion of Glycerol to Lactic Acid. *ChemCatChem*, **2016**, 8, 1094-1099	5.2	37
85	Dioxygen Activation by a Hexagonal SrMnO3 Perovskite Catalyst for Aerobic Liquid-Phase Oxidation. *ChemCatChem*, **2016**, 8, 3247-3253	5.2	34
84	Focus on advanced inorganic materials science: non-traditional concepts and approaches. *Science and Technology of Advanced Materials*, **2015**, 16, 020302	7.1	
83	Formation of 5-(Hydroxymethyl)furfural by Stepwise Dehydration over TiO2 with Water-Tolerant Lewis Acid Sites. *Journal of Physical Chemistry C*, **2015**, 119, 17117-17125	3.8	72
82	Recent progress in the development of solid catalysts for biomass conversion into high value-added chemicals. *Science and Technology of Advanced Materials*, **2015**, 16, 034903	7.1	87
81	Synthesis and oxidation catalysis of a Ti-substituted phosphotungstate, and identification of the active oxygen species. *Catalysis Science and Technology*, **2015**, 5, 4778-4789	5.5	18
80	Design of Highly Functionalized Polyoxometalate-Based Catalysts. *Bulletin of the Chemical Society of Japan*, **2015**, 88, 1017-1028	5.1	28
79	Synthesis, Structural Characterization, and Oxidation Catalysis of a Diniobium-substituted Silicodecatungstate. *Chemistry Letters*, **2015**, 44, 899-901	1.7	7
78	Synthesis and structural characterization of BINOL-modified chiral polyoxometalates. *Dalton Transactions*, **2015**, 44, 10947-51	4.3	11

77	Selective Oxidation with Aqueous Hydrogen Peroxide by [PO4{WO(O2)2}4]3□ Supported on Zinc-Modified Tin Dioxide. *ChemCatChem*, **2015**, 7, 1097-1104	5.2	26
76	Composites of [□H2PV2W10O40]3□ and [□SiW12O40]4□ Supported on Fe2O3 as heterogeneous catalysts for selective oxidation with aqueous hydrogen peroxide. *Catalysis Science and Technology*, **2015**, 5, 2602-2611	5.5	15
75	Synthesis of □Dawson-type silicotungstate [□Si2W18O62]8- and protonation and deprotonation inside the aperture through intramolecular hydrogen bonds. *Chemistry - A European Journal*, **2014**, 20, 5946-52	4.8	35
74	A basic germanodecatungstate with a -7 charge: efficient chemoselective acylation of primary alcohols. *Angewandte Chemie - International Edition*, **2014**, 53, 13248-52	16.4	33
73	Highly Selective Epoxidation of Cycloaliphatic Alkenes with Aqueous Hydrogen Peroxide Catalyzed by [PO4{WO(O2)2}4]3□ Imidazole. *ChemCatChem*, **2014**, 6, 2327-2332	5.2	13
72	Scope of chemical fixation of carbon dioxide catalyzed by a bifunctional monomeric tungstate. *Catalysis Today*, **2014**, 226, 160-166	5.3	35
71	A Basic Germanodecatungstate with a □7 Charge: Efficient Chemoselective Acylation of Primary Alcohols. *Angewandte Chemie*, **2014**, 126, 13464-13468	3.6	8
70	Selective N-Alkylation of Indoles with □Unsaturated Compounds Catalyzed by a Monomeric Phosphate. *ChemCatChem*, **2014**, 6, 2333-2338	5.2	13
69	Synthesis and structural characterization of inorganic-organic-inorganic hybrids of dipalladium-substituted □Keggin silicodecatungstates. *Inorganic Chemistry*, **2013**, 52, 2662-70	5.1	11
68	Efficient sulfoxidation with hydrogen peroxide catalyzed by a divanadium-substituted phosphotungstate. *Catalysis Today*, **2013**, 203, 76-80	5.3	32
67	Investigation of the Reaction Mechanism for the Epoxidation of Alkenes with Hydrogen Peroxide Catalyzed by a Protonated Tetranuclear Peroxotungstate with NMR Spectroscopy, Kinetics, and DFT Calculations. *European Journal of Inorganic Chemistry*, **2013**, 2013, 1943-1950	2.3	14
66	A Monovacant Lacunary Silicotungstate as an Efficient Heterogeneous Catalyst for Dehydration of Primary Amides to Nitriles. *ChemCatChem*, **2013**, 5, 1725-1728	5.2	27
65	Hydrosilylation of Various Multiple Bonds by a Simple Combined Catalyst of a Tungstate Monomer and Rhodium Acetate. *Chemistry Letters*, **2013**, 42, 980-982	1.7	11
64	Novel All-inorganic Mononuclear Chloro Oxo Diperoxotungstate. *Chemistry Letters*, **2013**, 42, 476-478	1.7	2
63	Efficient [WO4](2-)-catalyzed chemical fixation of carbon dioxide with 2-aminobenzonitriles to quinazoline-2,4(1H,3H)-diones. *Inorganic Chemistry*, **2012**, 51, 13001-8	5.1	90
62	Strategic design and refinement of Lewis acid-base catalysis by rare-earth-metal-containing polyoxometalates. *Inorganic Chemistry*, **2012**, 51, 6953-61	5.1	91
61	Structural and dynamical aspects of alkylammonium salts of a silicodecatungstate as heterogeneous epoxidation catalysts. *Dalton Transactions*, **2012**, 41, 9979-83	4.3	18
60	Rhodium acetate/base-catalyzed N-silylation of indole derivatives with hydrosilanes. *Chemical Communications*, **2012**, 48, 9269-71	5.8	36

59	Reversible deprotonation and protonation behaviors of a tetra-protonated Keggin silicodecatungstate. *Inorganic Chemistry*, **2012**, 51, 7932-9	5.1	24
58	Palladium(II) containing Keggin silicodecatungstate that efficiently catalyzes hydration of nitriles. *Journal of the American Chemical Society*, **2012**, 134, 6425-33	16.4	118
57	A highly negatively charged Keggin germanodecatungstate efficient for Knoevenagel condensation. *Chemical Communications*, **2012**, 48, 8422-4	5.8	66
56	Cyanosilylation of Carbonyl Compounds with Trimethylsilyl Cyanide Catalyzed by an Yttrium-Pillared Silicotungstate Dimer. *Angewandte Chemie*, **2012**, 124, 3746-3750	3.6	37
55	A Highly Active Protonated Tetranuclear Peroxotungstate for Oxidation with Hydrogen Peroxide. *Angewandte Chemie*, **2012**, 124, 4740-4743	3.6	13
54	Chemo- and Regioselective Direct Hydroxylation of Arenes with Hydrogen Peroxide Catalyzed by a Divanadium-Substituted Phosphotungstate. *Angewandte Chemie*, **2012**, 124, 7387-7390	3.6	13
53	A Bifunctional Tungstate Catalyst for Chemical Fixation of CO2 at Atmospheric Pressure. *Angewandte Chemie*, **2012**, 124, 6804-6807	3.6	41
52	Cyanosilylation of carbonyl compounds with trimethylsilyl cyanide catalyzed by an yttrium-pillared silicotungstate dimer. *Angewandte Chemie - International Edition*, **2012**, 51, 3686-90	16.4	103
51	A highly active protonated tetranuclear peroxotungstate for oxidation with hydrogen peroxide. *Angewandte Chemie - International Edition*, **2012**, 51, 4662-5	16.4	50
50	Chemo- and regioselective direct hydroxylation of arenes with hydrogen peroxide catalyzed by a divanadium-substituted phosphotungstate. *Angewandte Chemie - International Edition*, **2012**, 51, 7275-8	16.4	90
49	A bifunctional tungstate catalyst for chemical fixation of CO2 at atmospheric pressure. *Angewandte Chemie - International Edition*, **2012**, 51, 6700-3	16.4	218
48	Oxidative functional group transformations with hydrogen peroxide catalyzed by a divanadium-substituted phosphotungstate. *Catalysis Today*, **2012**, 185, 157-161	5.3	24
47	An efficient H2O2-based oxidative bromination of alkenes, alkynes, and aromatics by a divanadium-substituted phosphotungstate. *Chemical Communications*, **2011**, 47, 1692-4	5.8	68
46	Liquid-Phase Selective Oxidation by Multimetallic Active Sites of Polyoxometalate-Based Molecular Catalysts. *Topics in Organometallic Chemistry*, **2011**, 127-160	0.6	23
45	Molecular Design of Polyoxometalate-Based Compounds for Environmentally-Friendly Functional Group Transformations: From Molecular Catalysts to Heterogeneous Catalysts. *Catalysis Surveys From Asia*, **2011**, 15, 68-79	2.8	59
44	Efficient Heterogeneous Epoxidation of Alkenes by a Supported Tungsten Oxide Catalyst. *Angewandte Chemie*, **2011**, 123, 12268-12272	3.6	16
43	Efficient heterogeneous epoxidation of alkenes by a supported tungsten oxide catalyst. *Angewandte Chemie - International Edition*, **2011**, 50, 12062-6	16.4	69
42	Efficient epoxidation of electron-deficient alkenes with hydrogen peroxide catalyzed by [PW10O38V2(OH)2]3-. *Chemistry - A European Journal*, **2011**, 17, 7549-59	4.8	60

41	Inside Cover: Efficient Epoxidation of Electron-Deficient Alkenes with Hydrogen Peroxide Catalyzed by [PW10O38V2(OH)2]3(Chem. Eur. J. 27/2011). *Chemistry - A European Journal*, **2011**, 17, 7378-7378	4.8	
40	Catalytic oxidation of hydrocarbons with hydrogen peroxide by vanadium-based polyoxometalates. *Coordination Chemistry Reviews*, **2011**, 255, 2358-2370	23.2	291
39	Efficient stereo- and regioselective hydroxylation of alkanes catalysed by a bulky polyoxometalate. *Nature Chemistry*, **2010**, 2, 478-83	17.6	257
38	Sulfoxidation with hydrogen peroxide catalyzed by [SeO(4){WO(O(2))(2)}(2)](2-). *Dalton Transactions*, **2010**, 39, 5509-18	4.3	46
37	Epoxidation of alkenes with hydrogen peroxide catalyzed by selenium-containing dinuclear peroxotungstate and kinetic, spectroscopic, and theoretical investigation of the mechanism. *Inorganic Chemistry*, **2010**, 49, 2471-8	5.1	54
36	Cyclopropanation of Olefins with Diazo Compounds Catalyzed by a Dicopper-substituted Silicotungstate [H2SiW10O36Cu2(1,1-N3)2]4*Chemistry Letters*, **2010**, 39, 702-703	1.7	3
35	Green Oxidation Reactions by Polyoxometalate-Based Catalysts: From Molecular to Solid Catalysts. *Topics in Catalysis*, **2010**, 53, 876-893	2.3	81
34	A Flexible Nonporous Heterogeneous Catalyst for Size-Selective Oxidation through a Bottom-Up Approach. *Angewandte Chemie*, **2010**, 122, 10168-10172	3.6	13
33	A flexible nonporous heterogeneous catalyst for size-selective oxidation through a bottom-up approach. *Angewandte Chemie - International Edition*, **2010**, 49, 9972-6	16.4	52
32	Scope and reaction mechanism of an aerobic oxidative alkyne homocoupling catalyzed by a di-copper-substituted silicotungstate. *Catalysis Today*, **2010**, 157, 359-363	5.3	24
31	A supported copper hydroxide as an efficient, ligand-free, and heterogeneous precatalyst for 1,3-dipolar cycloadditions of organic azides to terminal alkynes. *ChemSusChem*, **2009**, 2, 59-62	8.3	58
30	Highly Selective Oxidation of Organosilanes to Silanols with Hydrogen Peroxide Catalyzed by a Lacunary Polyoxotungstate. *Angewandte Chemie*, **2009**, 121, 9062-9066	3.6	33
29	Highly selective oxidation of organosilanes to silanols with hydrogen peroxide catalyzed by a lacunary polyoxotungstate. *Angewandte Chemie - International Edition*, **2009**, 48, 8900-4	16.4	67
28	Hydrogen-bond-assisted epoxidation of homoallylic and allylic alcohols with hydrogen peroxide catalyzed by selenium-containing dinuclear peroxotungstate. *Journal of the American Chemical Society*, **2009**, 131, 6997-7004	16.4	92
27	Highly efficient oxidation of sulfides with hydrogen peroxide catalyzed by [SeO(4){WO(O(2))(2)}(2)](2-). *Chemical Communications*, **2009**, 3958-60	5.8	77
26	Synthesis and structural characterization of a monomeric di-copper-substituted silicotungstate [H2SiW10O36Cu2(1,1-N3)2]4and the catalysis of oxidative homocoupling of alkynes. *Journal of Catalysis*, **2008**, 258, 121-130	7.3	35
25	1,3-Dipolar cycloaddition of organic azides to alkynes by a dicopper-substituted silicotungstate. *Journal of the American Chemical Society*, **2008**, 130, 15304-10	16.4	150
24	Activation of Hydrogen Peroxide by Polyoxometalates **2008**, 155-176		5

23	A Keggin-type Dimeric Silicotungstate Sandwiching an Adamantanoid Tetra-nuclear Ruthenium Oxygen Cluster Core. *Chemistry Letters*, **2008**, 37, 328-329	1.7	16
22	An Efficient One-pot Three-component Reaction to Produce 1,4-Disubstituted-1,2,3-triazoles Catalyzed by a Dicopper-substituted Silicotungstate. *Chemistry Letters*, **2008**, 37, 1258-1259	1.7	19
21	Efficient oxidative alkyne homocoupling catalyzed by a monomeric dicopper-substituted silicotungstate. *Angewandte Chemie - International Edition*, **2008**, 47, 2407-10	16.4	165
20	Efficient Oxidative Alkyne Homocoupling Catalyzed by a Monomeric Dicopper-Substituted Silicotungstate. *Angewandte Chemie*, **2008**, 120, 2441-2444	3.6	38
19	Mu-eta1:eta1-peroxo-bridged dinuclear peroxotungstate catalytically active for epoxidation of olefins. *Inorganic Chemistry*, **2007**, 46, 3768-74	5.1	57
18	Olefin epoxidation with hydrogen peroxide catalyzed by lacunary polyoxometalate [gamma-SiW10O34H2O2]4-. *Chemistry - A European Journal*, **2007**, 13, 639-48	4.8	115
17	Synthesis, structural characterization, and catalytic performance of dititanium-substituted gamma-Keggin silicotungstate. *Inorganic Chemistry*, **2006**, 45, 2347-56	5.1	87
16	Molecular design of selective oxidation catalyst with polyoxometalate. *Catalysis Today*, **2006**, 117, 32-36	5.3	33
15	Liquid-Phase Oxidations Catalyzed by Polyoxometalates **2006**, 463-492		5
14	Heterogeneously catalyzed aerobic oxidative biaryl coupling of 2-naphthols and substituted phenols in water. *Journal of the American Chemical Society*, **2005**, 127, 6632-40	16.4	113
13	Epoxidation of olefins with hydrogen peroxide catalyzed by polyoxometalates. *Coordination Chemistry Reviews*, **2005**, 249, 1944-1956	23.2	586
12	Polyoxovanadometalate-catalyzed selective epoxidation of alkenes with hydrogen peroxide. *Angewandte Chemie - International Edition*, **2005**, 44, 5136-41	16.4	161
11	Polyoxovanadometalate-Catalyzed Selective Epoxidation of Alkenes with Hydrogen Peroxide. *Angewandte Chemie*, **2005**, 117, 5266-5271	3.6	36
10	Highly selective, recyclable epoxidation of allylic alcohols with hydrogen peroxide in water catalyzed by dinuclear peroxotungstate. *Chemistry - A European Journal*, **2004**, 10, 4728-34	4.8	74
9	Efficient, regioselective epoxidation of dienes with hydrogen peroxide catalyzed by [SiW10O34(H2O)2]4. *Journal of Catalysis*, **2004**, 224, 224-228	7.3	59
8	Efficient heterogeneous oxidation of alkylarenes with molecular oxygen. *Organic Letters*, **2004**, 6, 3577-80	6.2	81
7	[{W(O)(O2)2(H2O)}2(O)]2Catalyzed Epoxidation of Allylic Alcohols in Water with High Selectivity and Utilization of Hydrogen Peroxide. *Advanced Synthesis and Catalysis*, **2003**, 345, 1193-1196	5.6	53
6	Efficient Epoxidation of Olefins with 99% Selectivity and Use of Hydrogen Peroxide.. *ChemInform*, **2003**, 34, no		4

5	Efficient epoxidation of olefins with >/=99% selectivity and use of hydrogen peroxide. *Science*, **2003**, 300, 964-6	33.3	527
4	Liquid-Phase Oxidations with Hydrogen Peroxide and Molecular Oxygen Catalyzed by Polyoxometalate-Based Compounds185-216		22
3	Deposition of highly dispersed gold nanoparticles onto metal phosphates by deposition precipitation with aqueous ammonia. *Catalysis Science and Technology*,	5.5	1
2	Iron phosphate nanoparticle catalyst for direct oxidation of methane into formaldehyde: effect of surface redox and acid base properties. *Catalysis Science and Technology*,	5.5	4
1	A Heterogeneous Cobalt Catalyst for C C Bond Formation by Borrowing Hydrogen Strategy. *Catalysis Science and Technology*,	5.5	1